

## **Annual Report on Program Learning Outcomes Assessment**

**Program:** BS in Mechanical Engineering

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## 1. List the learning outcomes for the program:

• There are both Objectives for the program, and Student Learning Outcomes. Program educational objectives are what our graduates should achieve within the first few years after graduation. Student learning outcomes are what our students should have accomplished by the time they graduate. It is through the achievement of the outcomes that the students are prepared to achieve the objectives after graduation.

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Mechanical Engineering Program Educational Objectives

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- Graduates of the program will be prepared to:
- Join a technically sophisticated workforce as successful professionals in a wide range of mechanical engineering and related fields.
- Continuously improve and expand their technical and professional skills through formal means as well as through informal self-study.
- Pursue advanced degrees in engineering, business, or other professional fields.
- Advance themselves professionally and personally by accepting professional and societal responsibilities and pursuing leadership roles.

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Mechanical Engineering Student Outcomes

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At the time of graduation, students are expected to have:

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- (a) an ability to apply knowledge of mathematics, science, and engineering
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- (d) an ability to function on multidisciplinary teams
- (e) an ability to identify, formulate, and solve engineering problems
- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively
- (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- (i) a recognition of the need for, and an ability to engage in life-long learning
- (j) a knowledge of contemporary issues



• (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.